RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

10/552,515
PCT
10/20/2005

ENTERED



PCT

RAW SEQUENCE LISTINGPATENT APPLICATION: **US/10/552,515**DATE: 10/20/2005

TIME: 09:40:29

```
3 <110> APPLICANT: The Government of the United States of America as
              represented by the Secretary of the Department of Health and
             Human Services
              Bera, Tapan K.
      6
              Pastan, Ira H.
             Lee, Byungkook
      8
     10 <120> TITLE OF INVENTION: GENE EXPRESSED IN PROSTATE CANCER AND METHODS OF USE
     12 <130> FILE REFERENCE: 4239-68223-02
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/552,515
C--> 14 <141> CURRENT FILING DATE: 2005-10-06
     14 <150> PRIOR APPLICATION NUMBER: PCT/US2004/10588
     15 <151> PRIOR FILING DATE: 2004-04-05
     17 <150> PRIOR APPLICATION NUMBER: 60/461,399
    18 <151> PRIOR FILING DATE: 2003-04-08
    20 <160> NUMBER OF SEQ ID NOS: 12
    22 <170> SOFTWARE: PatentIn version 3.2
    24 <210> SEQ ID NO: 1
    25 <211> LENGTH: 933
    26 <212> TYPE: PRT
    27 <213> ORGANISM: Artificial Sequence
    29 <220> FEATURE:
    30 <223> OTHER INFORMATION: Splice Variant-Novel Gene Expressed in Prostate
    32 <400> SEQUENCE: 1
    34 Met Arg Met Ala Ala Thr Ala Trp Ala Gly Leu Gln Gly Pro Pro Leu
    38 Pro Thr Leu Cys Pro Ala Val Arg Thr Gly Leu Tyr Cys Arg Asp Gln
    42 Ala His Ala Glu Arg Trp Ala Met Thr Ser Glu Thr Ser Ser Gly Ser
    43
                                    40
    46 His Cys Ala Arg Ser Arg Met Leu Arg Arg Arg Ala Gln Glu Glu Asp
    50 Ser Thr Val Leu Ile Asp Val Ser Pro Pro Glu Ala Glu Lys Arg Gly
                            70
    54 Ser Tyr Gly Ser Thr Ala His Ala Ser Glu Pro Gly Gly Gln Gln Ala
    58 Ala Ala Cys Arg Ala Gly Ser Pro Ala Lys Pro Arg Ile Ala Asp Phe
                    100
                                        105
    62 Val Leu Val Trp Glu Glu Asp Leu Lys Leu Asp Arg Gln Gln Asp Ser
                                    120
    66 Ala Ala Arg Asp Arg Thr Asp Met His Arg Thr Trp Arg Glu Thr Phe
                                135
    70 Leu Asp Asn Leu Arg Ala Ala Gly Leu Cys Val Asp Gln Gln Asp Val
    71 145
                            150
                                                155
                                                                     160
```

74 75	Gln	Asp	Gly	Asn	Thr 165	Thr	Val	His	Tyr	Ala 170	Leu	Leu	Ser	Ala	Ser 175	Trp
78 79	Ala	Val	Leu	Cys 180	Tyr	Tyr	Ala	Glu	Asp 185	Leu	Arg	Leu	Lys	Leu 190	Pro	Leu
	Gln	Glu	Leu 195		Asn	Gln	Ala	Ser 200		Trp	Ser	Ala	Gly 205	Leu	Leu	Ala
86	Trp			Ile	Pro	Asn	Val 215		Leu	Glu	Val	Val 220		Asp	Val	Pro
87 90	Pro	210 Glu	Tvr	Tvr	Ser	Cvs		Phe	Ara	Val	Asn		Leu	Pro	Ara	Phe
	225		-7-	-1-		230	5		5		235	-1-			3	240
94	Leu	Gly	Ser	Asp	Asn	Gln	Asp	Thr	Phe	Phe	Thr	Ser	Thr	Lys	Arg	His
95					245					250					255	
	Gln	Ile	Leu		Glu	Ile	Leu	Ala	_	Thr	Pro	\mathtt{Tyr}	Gly	His	Glu	Lys
99				260					265	_				270	_	_
		Asr			ı Gl	/ Ile	His			ı Lev	ı Ala	ı Glu			. Leu	Ser
103			275		_		_	280		_,	_		285		~7	~7
				Pro) Let	1 His	_	_	Pro	o Phe	э Гуз			Pro	GIU	Gly
107		290				. .	295					300		- 41		
			1 Ala	Pro	Arg			1 GLI	ı Arg	g GII			ı Pne	e GII	HIS	Trp
	305		. M	. al.		310	-		- m	. al-	315		7 ~~	, 11:6		320
		Arg	III	, ст	у Буг 325) ASI	гга	y I Y I	330		, тег	ı Ası	י חוב	335	Arg
115		. П	n Dha	۵1,			. 17-1	7 T -				. א ז -	. п	. T.O.		Phe
119		, IVI	. File	340		тъ	, vai	. AIC	34!		. FIIe	HIC	1 TTF	350		FILE
-		The	- G1s			1 T.A1	Dro	\ 7 .7 -			17a 1	വ	, The			Phe
123	_	. 1111	355	_	LCC	шс		360		ı vaı	. vai	. 01)	365		· vai	. 1110
		. Val			: Phe	T.e.	ı Val			r Agr) T]e	Pro			Glu	Leu
127		370	_	07.			375			1		380				
				Lvs	Ast	Sei			ı Met	Cys	Pro			s Lev	Asp	Cys
	. 385	_		•	_	390				•	395		•			400
134	Pro	Phe	Trp	Leu	ı Leı	ı Sei	Ser	Ala	а Суя	s Ala	Let	ı Ala	a Glr	n Ala	Gly	Arg
135			_		405				_	410					415	
138	Let	ı Phe	. Asp	His	Gly	/ Gly	/ Thr	· Val	l Phe	e Phe	e Ser	Leu	ı Phe	e Met	Ala	Leu
139)			420)				425	5				430)	
142	Trp	Ala	val	. Let	ı Leı	ı Leı	ı Glu	ι Туз	r Tr	Lys	arç	J Lys	s Ser	: Ala	Thr	Leu
143			435					44(-				445			
146	Ala	Туг	Arg	Trp	Asp	Cys	s Ser	Ası	у Туз	r Glu	ı Asp	Thr	: Glu	ı Glü	Arg	Pro
147		450					455					460				_
															Pro	Ile
															_	480
		Gly	r Glu	Asp			туг	Phe	e Pro			, Ser	Arg	3 Ala		Arg
155		_			485					490				** . 7	495	
		: Let	1 Ala	_		· val	. vai	. 116			. Met	: vaı	L Ala			. Val
159				500		7.	7-		505					510		77-7
		. Cys			. sei	. 116	; TT6		_	r Arg	ATE	f TTE			TIE	Val
163		Co-	515		. (1)-	. 7.~~	, ጥኤ _~	520		, או	, 7,7 -	, m	525 • 14		· 7 · · ·	. Tla
				, ser	GT.	ASI	535		ı net	T WIS	. Alč	540		a sel	. MIG	Ile
167		530		ጥ ከ~	. C1.	, Ca			1 7 ~~	ı Lev	1 77-1			יים ד	т1-	Leu
1/0	- TTC	· ner	. .		. उ⊥}	, ner	. val	. va.	rusi	* 71C	. val	. 5116		, <u> </u>		. <u></u> -u

	545			_		550		_		_	555	_				560
	Ser	Lys	Ile	Tyr		Ser	Leu	Ala	His		Leu	Thr	Arg	Trp		Met
175					565					570					575	
	His	Arg	Thr		Thr	Lys	Phe	Glu	-	Ala	Phe	Thr	Leu	_	Val	Phe
179	_		_	580					585					590		
182	Ile	Phe		Phe	Val	Asn	Phe	Tyr	Ser	Ser	Pro	Val	Tyr	Ile	Ala	Phe
183			595					600					605			
	Phe		Gly	Arg	Phe	Val	_	Tyr	Pro	Gly	Asn	-	His	Thr	Leu	Phe
187	_	610			_	_	615	_	_			620				
	_	Val	Arg	Asn	Glu		Cys	Ala	Ala	Gly	-	Cys	Leu	Ile	Glu	Leu
	625					630	_			_	635	_		_		640
	Ala	Gln	Glu	Leu		Val	Ile	Met	Val	_	Lys	Gln	Val	Ile		Asn
195		-			645					650					655	_
	Met	Gln	Glu		Leu	Ile	Pro	Lys		Lys	Gly	Trp	Trp		Lys	Phe
199				660					665				_	670	_	
	_	Leu	_	Ser	Lys	Lys	Arg	Lys	Ala	Gly	Ala	Ser		Gly	Ala	Ser
203			675	_		_	_	680		_		_	685		-	_
	GIn	_	Pro	Trp		-	_	Tyr	Glu	Leu	Val		Cys	Glu	Gly	Leu
207	_,	690		_			695		_		:	700			_,	
		Asp	GIu	Tyr	Leu		Met	Val	Leu	GIn		GIY	Phe	Val	Thr	
	705				_	710	_		_	_	715		_	_	_	720
	Pne	vai	АТА	Ата	-	Pro	ьeu	Ala	Pro		Pne	Ala	Leu	Leu		Asn
215	·	**- 7	a 1	-1 -	725	.	3	37 -	•	730	5 1	••• •	~	~ 1	735	
	Trp	vai	GIU		Arg	Leu	Asp	Ala	_	ьуs	Pne	vai	Cys		Tyr	Arg
219	3	D	** - 7	740	~1	•	7 7 -	~ 1	745	- 2 -	~1	-1.		750	•••	-7.
	Arg	Pro		АТА	GIU	Arg	Ara	Gln	Asp	ıте	GIY	тте	_	Pne	HIS	тте
223	7	77.	755	T	mla sa	77.2	T	760	77-7	т1 -	C	7	765	Dh.	T	T
227	Leu	770	GIY	ьeu	THE	HIS	775	Ala	vai	тте	ser	780	Ala	Pne	ьeu	Leu
	λla		cor	cor.	7 cm	Dho		Pro	7~~	ת דת	Ф тъ		7 ~~	Ten	Thr	7 ~~~
	785	FIIE	SET	SET	Asp	790	пеп	PLO	Arg	AIA	795	TAT	Arg	пр	1111	800
		Hic	Aen	T.011	Ara		Dhe	Leu	Δen	Dhe		T.A11	Δla	Δrα	Δla	
235	7.1LU		пор	Lea	805	O _T	1110	шси	11011	810		шси	niu	n. g	815	110
	Ser	Ser	Phe	Δla		Δla	Hic	Asn	Δra		Cvc	Δra	Tyr	Δra		Dhe
239	-	001		820					825		Cyb	9	-1-	830	1114	
	Ara	Asp	Asp		Glv	His	Tvr	Ser		Thr	Tvr	Trn	Asn		Leu	Ala
243	9		835	p	017		-1-	840	V		-1-		845			
	Ile	Ara		Ala	Phe	Val	Ile	Val	Phe	Glu	His	Val		Phe	Ser	Val
247		850					855					860				
	Glv		Leu	Leu	Asp	Leu		Val	Pro	Asp	Ile		Glu	Ser	Val	Glu
	865	,				870					875					880
		Lvs	Val	Lvs	Ara	Glu	Tvr	Tyr	Leu	Ala		Gln	Ala	Leu	Ala	
255		•		•	885		•	•		890	•				895	
258	Asn	Glu	Val	Leu	Phe	Glv	Thr	Asn	Glv	Thr	Lvs	Asp	Glu	Gln		Lvs
259				900		4			905		-			910		•
	Gly	Ser	Glu	Leu	Ser	Ser	His	Trp	Thr	Pro	Phe	Thr	Val		Lys	Ala
263	-		915					920					925		-	
266	Ser	Gln	Leu	Gln	Gln											
267		930														

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\10202005\J552515.raw

270 <210> SEQ ID NO: 2 271 <211> LENGTH: 3308 272 <212> TYPE: DNA 273 <213> ORGANISM: Artificial Sequence 275 <220> FEATURE: 276 <223> OTHER INFORMATION: Splice Variant-Novel Gene Expressed in Prostate 278 <400> SEQUENCE: 2 279 aaaagataga teetgeteea ggageeggga ageetegeee tggeeagetg tgetgggeae 60 281 ctcccctgcc tgcttcctgg cccacttgca ggcaaggtga gggcatgcga atggctgcca 120 180 283 ctgcctgggc ggggctccaa gggccacccc tccccaccct ctgtcccgca gtgaggacgg 285 gactetactg ccgagaccag getcacgetg agaggtggge catgacetec gagacetett 240 287 ccggaagcca ctgtgccagg agcaggatgc tgcggcgacg ggcccaggaa gaggacagca 289 ccgtcctgat cgatgtgagc ccccctgagg cagagaagag gggctcttac gggagcacag 360 291 cccaegcete ggagccaggt ggacagcaag cggccgcetg cagagetggg agtcctgcca 420 293 agccccggat cgcagacttc gtcctcgttt gggaggagga cctgaagcta gacaggcagc 480 295 aggacagtgc cgcccgggac agaacagaca tgcacaggac ctggcgggag acttttctgg 540 600 297 ataatetteg tgeggetggg etgtgtgtag accageagga egtecaggae gggaacaeca 299 cagtgcacta cgccctcctc agcgcctcct gggctgtgct ctgctactac gccgaagacc 660 301 tgcgcctgaa gctgcccttg caggagttac ccaaccaggc ctccaactgg tcggccggcc 720 303 tgctggcatg gctgggcatc cccaacgtcc tgctggaggt tgtgccagac gtaccccccg 780 840 305 agtactactc ctgccggttc agagtgaaca agctgccacg cttcctcggg agtgacaacc 307 aggacacett etteacaage accaagagge accaaattet gtttgagate etggecaaga 900 960 309 ccccgtatgg ccacgagaag aaaaacctgc ttgggatcca ccagctgctg gcagagggtg 311 tecteagtge egeetteece etgeatgaeg geecetteaa gaegeeecea gagggeeege 1020 1080 313 aggetecaeg ceteaaceag egecaagtee ttttecagea etgggegege tggggeaagt 315 ggaacaagta ccagcccctg gaccacgtgc gcaggtactt cggggagaag gtggccctct 1140 317 acttegeetg getegggttt tacacagget ggeteetgee ageggeagtg gtgggeacae 1200 319 tggtgttcct ggtgggctgc ttcctggtgt tctcagacat acccacgcag gaactgtgtg 1260 321 gcagcaagga cagcttcgag atgtgcccac tttgcctcga ctgccctttc tggctgctct 1320 323 ccaqcqcctq tqccctqqcc caqqccqqcc qqctqttcqa ccacqqcqqc accqtqttct 1380 325 tcagcttgtt catggcactg tgggccgtgc tgctgctgga gtactggaag cggaagagcg 1440 1500 327 ccacgctggc ctaccgctgg gactgctctg actacgagga cactgaggag aggcctcggc 1560 329 cccagtttgc cgcctcagcc cccatgacag ccccgaaccc catcacgggt gaggacgagc 331 cctacttccc tqaqaqqaqc cqcqcqccc qcatqctqqc cqqctctqtq qtqatcqtqq 1620 333 tgatggtggc cgtggtggtc atgtgcctcg tgtctatcat cctgtaccgt gccatcatgg 1680 335 ccatcgtggt gtccaggtcg ggcaacaccc ttctcgcagc ctgggcctct cgcatcgcca 1740 337 geetcaeggg gtetgtagtg aacetegtet teateeteat eeteteeaag atetatgtat 1800 339 ccctggccca cgtcctgaca cgatgggaaa tgcaccgcac ccagaccaag ttcgaggacg 1860 341 ccttcaccct caaggtgttc atcttccagt tcgtcaactt ctactcctca cccgtctaca 1920 1980 343 ttgccttctt caagggcagg tttgtgggat acccaggcaa ctaccacacc ttgtttggag 2040 345 teegeaatga ggagtgegeg getggagget geetgatega getggeacag gageteetgg 2100 347 tcatcatggt gggcaagcag gtcatcaaca acatgcagga ggtcctcatc ccgaagctaa 349 agggctggtg gcagaagttc cggcttcgct ccaagaagag gaaggcggga gcttctgcag 2160 351 gggctagcca ggggccctgg gaggacgact atgagcttgt gccctgtgag ggtctgtttg 2220 353 acgagtacct ggaaatggtg ctgcagttcg gcttcgtcac catcttcgtg gccgcctgtc 2280 355 egetegegee getettegee etgeteaaca aetgggtgga gateegettg gaegegegea 2340 357 agttcgtctg cgagtaccgg cgccctgtgg ccgagcgcgc ccaggacatc ggcatctggt 2400 2460 359 tecacateet ggegggeete aegeacetgg eggteateag caacgeette eteetggeet 361 tetegteega etteetgeeg egegeetaet aceggtggae eegegeecae gaeetgegeg 2520

```
363 getteeteaa etteaegetg gegegageee egteeteett egeegeegeg cacaacegea
                                                                         2580
365 cgtgcaggta tcgggctttc cgggatgacg atggacatta ttcccagacc tactggaatc
                                                                         2640
367 ttettgecat eegeetggee ttegteattg tgtttgagea tgtggtttte teegttggee
                                                                         2700
369 gcctcctgga cctcctggtg cctgacatcc cagagtctgt ggagatcaaa gtgaagcggg
371 agtactacct ggctaagcag gcactggctg agaatgaggt tcttttttgga acgaacggaa
                                                                         2820
373 caaaggatga gcagcccaag ggctcagagc tcagctccca ctggacaccc ttcacggttc
                                                                         2880
375 ccaaggccag ccagctgcag cagtgacqcc tggaaggaca tctggtggtc cttaggggag
                                                                         2940
377 tggcccctcc tgagccctgc gagcagcgtc cttttcctct tccctcaggc agcggctgtg
                                                                         3000
379 tgaaccgctg gctgctgttg tgcctcatct ctgggcacat tgcctgcttc cccccagcgc
                                                                         3060
381 eggettetet ceteagageg cetgteacte cateceegge agggagggae egteagetea
                                                                         3120
383 caaggccctc tttqtttcct qctcccaqac ataagcccaa qqqqcccctq cacccaaggq
385 accetytece teggtygeet ecceaggeee etygacacga eagtteteet caggeaggty
                                                                         3240
387 ggetttgtgg teetegeege eeetggeeae ategeeetet eetettacae etggtgaeet
                                                                         3300
389 tcqaatqt
                                                                         3308
392 <210> SEQ ID NO: 3
393 <211> LENGTH: 9
394 <212> TYPE: PRT
395 <213> ORGANISM: Artificial Sequence
397 <220> FEATURE:
398 <223> OTHER INFORMATION: Splice Variant-Novel Gene Expressed in Prostate
400 <400> SEQUENCE: 3
402 Ser Leu Phe Met Ala Leu Trp Ala Val
403 1
406 <210> SEQ ID NO: 4
407 <211> LENGTH: 9
408 <212> TYPE: PRT
409 <213> ORGANISM: Artificial Sequence
411 <220> FEATURE:
412 <223> OTHER INFORMATION: Splice Variant-Novel Gene Expressed in Prostate
414 <400> SEQUENCE: 4
416 Val Leu Leu Glu Val Val Pro Asp Val
417 1
420 <210> SEQ ID NO: 5
421 <211> LENGTH: 9
422 <212> TYPE: PRT
423 <213> ORGANISM: Artificial Sequence
425 <220> FEATURE:
426 <223> OTHER INFORMATION: Splice Variant-Novel Gene Expressed in Prostate
428 <400> SEQUENCE: 5
430 Ala Leu Leu Ser Ala Ser Trp Ala Val
431 1
                    5
434 <210> SEQ ID NO: 6
435 <211> LENGTH: 9
436 <212> TYPE: PRT
437 <213> ORGANISM: Artificial Sequence
439 <220> FEATURE:
440 <223> OTHER INFORMATION: Splice Variant-Novel Gene Expressed in Prostate
442 <400> SEQUENCE: 6
444 Leu Leu Ala Ile Arg Leu Ala Phe Val
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/552,515

DATE: 10/20/2005 TIME: 09:40:30

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\10202005\J552515.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date